

Atty Dkt. No.: 10004032-1
USSN: 09/775,375

REMARKS

In view of the following remarks, the Examiner is respectfully requested to withdraw the rejections and allow Claims 1-21, 32 and 33, the only claims pending in this application.

As stated in the Office Action dated September 21, 2004, Claim 9 is drawn to allowable subject matter.

Claim Rejections - 35 USC § 103

The Examiner has rejected Claims 1 – 8, 10 – 21, 32 and 33 under 35 U.S.C. § 103(a) as being obvious over Besemer et al. (US 6,140,044) in view of Juntunen et al. (US 5,325,624).

With regard to obviousness-type rejections, MPEP § 2142 states:

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. *In re Vaeck*, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

The rejected claims relate to a microarray strip comprising: a pocket strip having a number of pockets, microarrays placed in the pockets of the pocket strip, and a non-rigid cover strip that is bonded to the pocket strip thereby generating sealed chambers, each of which contains an array.

The claims have been rejected over the asserted teachings of Besemer et al. and Juntunen et al. In making this rejection, the Examiner asserts that Besemer et al. teaches a single microarray chip sealed in a single housing but does not teach a microarray strip having multiple pockets as is claimed. To remedy this deficiency, the Examiner cites Juntunen et al., which assertedly teaches a carrier having multiple pockets with a component sealed in each (e.g., electrical components).

The Applicants submit that the asserted teachings of Besemer et al. and Juntunen et al. fail to establish a *prima facie* case of obviousness because they fail to teach each and every element of the claimed invention. Specifically, these cited

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references fail to teach a microarray strip in which the cover strip is sealed to the pocket strip to create sealed chambers.

In making this rejection, the Examiner asserts that Besemer et al. teach "a single microarray packaged in a single sealed chamber by the use of adhesive film" citing column 15, lines 37-48. This passage of Besemer et al. reads as follows:

A cover 2770 is mated to the housing for sealing the cavity. Preferably, **cover 2770 is composed of a transparent or translucent material such as glass, acrylic, or other material that is penetrable by light. Cover 2770 may be mated to surface 2705 with an adhesive 2772, which in some embodiments may be silicone, adhesive film, or other adhesive.** Optionally, a depression may be formed around the cavity such that surface 2771 of the cover is at least flush with surface 2705. Alternatively, the cover may be mated to surface 2705 according to any of the chip attachment techniques described herein. *(bold added for emphasis)*

As is apparent from this passage, the cover of the housing disclosed in Besemer et al. is a rigid material such as glass, acrylic or other material that is penetrable by light. At no point does Besemer et al. mention or suggest a non-rigid cover for sealing the chambers of a microarray holder as is required in the rejected claims.

The Examiner cites Juntunen et al. to remedy the deficiencies in Besemer et al. Specifically, the Examiner asserts that Juntunen et al. teaches a carrier tape having pocket strip for holding components covered by a cover strip that seals the chambers of the pocket strip. In making this rejection, the Examiner cites col. 5, lines 40-55, which states:

A particularly advantageous feature of the present invention is provided by the cover strip 120. Cover strip 120 is applied over the pockets of the carrier tape to contain the components therein. As shown in FIGS. 3 through 6, flexible, elongate cover strip 120 overlies part or all of pockets 112, and is disposed between the rows of advancement holes 108 and 110 along the length of carrier tape 100. Cover strip 120 includes parallel longitudinal bonding portions 122 and 124 that are bonded to longitudinal edge surfaces 104 and 106, respectively, of carrier tape 100. For example, a pressure sensitive adhesive, or a heat-activated adhesive such as an ethylene vinyl acetate (EVA) copolymer may be used to adhere the cover strip to edge surfaces 104 and 106. *(emphasis added)*

As is evident from this passage, the cover strip of Juntunen et al. is attached to the pocket strip only at the longitudinal edge surfaces. In this configuration, it is impossible for the cover strip to provide sealed chambers from the pockets in the pocket strip. Specifically, bonding the cover strip to the pocket strip only along the longitudinal edges leaves the regions between the pockets unsealed. Therefore, the

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cover strip of Juntunen et al. is not bonded to the pocket strip to provide sealed chambers as is claimed. The Applicants have found no additional citation in Juntunen et al. in which a cover strip provides sealed chambers.

Furthermore, it is clear from the disclosure of Juntunen et al. that the carrier strip disclosed therein would not function as intended¹ if the cover strip were bonded to the pocket strip to form sealed chambers. Specifically, if the cover strip were bonded to the pocket strip along more than just the longitudinal axes, the medial portion of the cover strip could not be removed in an automated fashion as described in col. 5 line 56 to col. 6 line 9, which states:

Cover strip 120 also includes means for enabling separation of a medial portion 126 of cover strip 120 overlying the pockets from bonding portions 122 and 124 to provide access to the contents of the pockets. In the preferred embodiment, separation means includes a tear strip 128 applied over medial portion 126 along the length of cover strip 120, as shown in FIG. 3. Cover strip 120 is preferably constructed of a uniaxially or biaxially oriented film to facilitate downweb tearing, and to reduce or prevent transverse tearing. Tear strip 128 is resistant to tearing, and thus medial portion 126 of cover strip 120 may be peeled away from carrier tape 100, leaving bonding portions 122 and 124 attached to edge surfaces 104 and 106. Bonding portions 122 and 124 remain affixed to edge surfaces 104 and 106 due to the initial bonding of the cover strip to the carrier tape, or due to the heat encountered when the carrier tape and components are dried within an oven. Tear strip 128 also assists in guiding the propagation of opposed longitudinal tears in cover strip 120 between tear strip 128 and bonding portions 122 and 124, which exposes the contents of pockets 112.

Because bonding a non-rigid cover strip to a pocket strip to form sealed chambers as is claimed would render the carrier strip of Juntunen et al. unsatisfactory for its intended purpose (i.e., the medial portion of the cover strip could not be automatically removed as intended), the Applicants submit that there is no suggestion or motivation to combine its teachings with Besemer et al.

As such, the Applicants respectfully request withdrawal of this rejection.

¹ MPEP §2143.01(V) states the following with regard to establishing a *prima facie* case of obviousness:

If proposed modification would render the prior art invention being modified unsatisfactory for its intended purpose, then there is no suggestion or motivation to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984)


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CONCLUSION

In view of the remarks above, the Applicants respectfully submit that all of the claims are in condition for allowance, which action is requested. If the Examiner finds that a telephone conference would expedite the prosecution of this application, please telephone David C. Scherer, Ph.D. at (650) 327-3400. The Commissioner is hereby authorized to charge any fees under 37 C.F.R. §§ 1.16 and 1.17 which may be required by this paper, or to credit any overpayment, to Deposit Account No. 50-1078 order number 10004032-1.

Respectfully submitted,

Date: 4-11-06

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